

[What is claimed is:]

1. An audio amplifier, comprising:  
amplification means that amplifies and outputs audio signals based on supplied power source voltage; and  
voltage conversion means that is arranged in the latter stage of said amplification means, and that performs voltage conversion from the input voltage to the output voltage.
2. An audio amplifier, comprising:  
a power switch for which transistors perform switching operations according to the pulse width of a supplied driving signal, and which amplifies and outputs audio signals based on the power source voltage supplied to said transistors; and  
a transformer that is arranged in the latter stage of said power switch, and that performs voltage conversion based on the signals inputted from said power switch.
3. The audio amplifier according to claim 2, wherein:  
areas of said transistors that constitute said power switch are formed into necessary sizes in order to input a desired quantity of current into said transformer based on said power source voltage.
4. The audio amplifier according to claim 2, further comprising:  
the second power source voltage connected to said transformer, in addition to the power source voltage connected to said power switch;  
wherein said second power source voltage is larger than said power source voltage.

5. The audio amplifier according to claim 4, further comprising:  
two transistors that perform switching operations based on output signals of said power switch and that input current into said transformer based on said second power source voltage;  
wherein said two transistors are forced to be driven alternatively.

6. An audio amplifier that is structured to drive audio output means though the switching operations of transistors, wherein:  
voltage conversion means that converts input current into voltage output is arranged between amplification means that amplifies and outputs audio signals based on the power source voltage supplied to said transistors and said audio output means.